

AMENDMENT

Amend the application, without prejudice, as follows:

In the Claims:

This following listing of claims replaces all prior versions, and listings, in the application:

1. (Currently Amended) A power wheelchair comprising:

a frame;

a pair of drive wheels, each wheel having an axis of rotation;

motors for driving respective drive wheels;

a pair of suspension arms, one on each side of the frame, each arm pivoted to the frame about a suspension axis rearward of the axes of rotation of the drive wheels, each of the drive wheels and its associated motor being mounted on a respective one of the suspension arms;

at least one ground-engaging idler wheel connected to said frame in front of said drive wheels; and

at least one anti-tip wheel mounted to ~~the wheelchair so as to be one of said suspension arms, rearward of the respective drive wheel, the at least one anti-tip wheel being in contact with the ground in a normal resting operational state of the wheelchair and connected to one of the drive wheels, the connection between the anti-tip wheel and the drive wheel permitting about the suspension axis of rotation of causing~~ said anti-tip wheel to move relative to said frame in response to and in an opposite direction from movement ~~of the axis of rotation of said one drive wheel relative to said frame as a result of the torque created by the motor in rotating the drive wheel.~~

2. (Original) The power wheelchair of claim 1, further comprising a second anti-tip wheel, said anti tip wheels being connected to respective ones of said drive wheels.

3. (Cancelled)
4. (Original) The power wheelchair of claim 1, wherein said at least one anti-tip wheel is mounted on a respective one of the suspension arms rearward of said suspension axis.
5. (Original) The power wheelchair of claim 1, further comprising a resilient suspension between each said suspension arm and said frame.
6. (Currently Amended) A power wheelchair comprising:
a frame;
a pair of drive wheels, each wheel having an axis of rotation;
motors for driving respective drive wheels;
a pair of suspension arms, one on each side of the frame, each arm pivoted to the frame about a suspension axis rearward of the axes of rotation of the drive wheels, each of the drive wheels and its associated motor being mounted on a respective one of the suspension arms;
at least one ground-engaging idler wheel connected to said frame in front of said drive wheels;
at least one anti-tip wheel mounted to the wheelchair so as to be in contact with the ground in a normal resting state of the wheelchair and connected to one of the drive wheels, the connection between the anti-tip wheel and the drive wheel permitting the axis of rotation of said anti-tip wheel to move relative to said frame in response to and in an opposite direction from movement of the axis of rotation of said one drive wheel relative to said frame; and
a resilient suspension between each said suspension arm and said frame. The power wheelchair of claim 5, wherein each said resilient suspension further comprises combination spring-strut beams for governing arcuate upward movement of said anti-tip wheels relative to said frame.

7. (Original) The power wheelchair of claim 1, wherein each said suspension arm is independently attached to said frame.
8. (Original) The power wheelchair of claim 1, wherein said frame includes an upper covering shell.
9. (Original) The power wheelchair of claim 8, wherein the frame supports a seat.
10. (Cancelled)
11. (Currently Amended) A power wheelchair comprising:
 - a frame;
 - a pair of drive wheels rotatable about transverse axes and positioned on opposite sides of the frame;
 - a pair of drive motors, each motor operatively couple to a respective drive wheel;
 - a pair of suspension arms, each suspension arm pivotally connected to said frame, the motors for driving and respective drive wheels attached to a respective suspension arm forward of the pivotal connection of the suspension arm to the frame;
 - at least one idler wheel attached to the frame so as to be positioned forward of the drive wheels, the idler wheel normally contacting the ground along with the drive wheels; and
 - a pair of anti-tip wheels respectively mounted to the suspension arm on each side of the frame wheelchair so as to be, each anti-tip wheel normally in contact with the ground and positioned rearward of said the corresponding drive wheels and rearward of the pivotal mounting of the suspension arm, the anti-tip wheels being fixedly connected operatively coupled to said motors by said suspension arms and responsive to the torque created by the motors and applied to the drive wheels for relative up-and-down motion relative to said frame in opposite directions from the torque of said motors.

12. (Original) The power wheelchair of claim 11, wherein each drive wheel is independently attached to said frame.

13. (Original) The power wheelchair of claim 11, wherein said frame includes an upper covering shell.

14. (Original) The power wheelchair of claim 13, wherein said frame supports a seat.

15. (Currently Amended) A power wheelchair comprising:

a frame;

a pair of drive wheels rotatable about transverse axes;

motors pivotally connected to said frame, the motors for driving respective drive wheels;

at least one idler wheel attached to the frame so as to be positioned forward of the drive wheels;

anti-tip wheels mounted to the wheelchair so as to be in contact with the ground and rearward of said drive wheels, the anti-tip wheels being fixedly connected to said motors for up-and-down motion relative to said frame in opposite directions from said motors; and The power wheelchair of claim 11, further comprising

combination spring-strut beams for governing arcuate upward movement of said anti-tip wheels relative to said frame.

16. (Original) The power wheelchair of claim 11, further comprising means for adjusting the distance between said anti-tip wheels and the ground.

17. (Currently Amended) A power wheelchair comprising:

a frame;

a pair of ground contacting drive wheels disposed on opposite sides of the frame;

a pair of motors, each motor independently driving a respective drive wheel;

a pair of suspension arms, one on each side of the frame, each suspension arm pivots attached pivoted to the frame, each of the drive wheels and its associated motor being mounted on a respective one of the suspension arms;

a pair of springs, each acting in compression between the frame and a respective one of the suspension arms so as to urge the drive wheel downward relative to the frame;

at least one ground contacting idler wheel disposed at the front of the frame, forward of the drive wheels; and

at least one anti tip idler wheel mounted to one of the suspension arms opposite of the respective motor and rearward of the frame, the at least one anti-tip idler wheel being mounted so as to normally be in contact with the ground when the wheelchair is resting on level ground on the drive wheels and the at least one front idler wheel, said at least one anti-tip idler wheel being mounted such that reverse acceleration torque of the motors on the drive wheels wheelchair urges upward movement of the anti-tip idler wheel in an upward direction and out of contact with the ground.

18. (Cancelled)

19. (Currently Amended) A power wheelchair according to claim-18-17, wherein there are two anti-tip idler wheels, one of the anti-tip idler wheel mounted on either side of said frame, wherein the suspension arms are independently mounted, and wherein each said anti-tip idler wheel is connected to an associated suspension arm.

20. (Original) A power wheelchair according to claim 17, wherein the drive wheels are mounted with their axes of rotation fixed relative to the suspension arms and located forward of the pivot point of the suspension arms.

21. (Original) A power wheelchair according to claim 17, wherein the motors are mounted on the suspension arms forward of the drive wheels.

22. (Original) A power wheelchair according to claim 17, wherein there are two anti-tip wheels, and wherein said suspension arms include a pair of pivotally-mounted rocker arms, with a respective drive wheel and anti-tip wheel mounted on each rocker arm, the rocker arm being pivotally mounted at a point between the drive wheel and the anti-tip wheel.

23. (Original) A power wheelchair according to claim 22, wherein one spring attaches to each rocker arm between the drive wheel and the anti-tip wheel.

24. (Original) A power wheelchair according to claim 17, further comprising a second pair of springs urging the anti-tip idler wheels downwards relative to the frame.

25. (Original) A power wheelchair according to claim 17, wherein said frame includes an upper covering shell.

26. (Original) A power wheelchair according to claim 17, further comprising two said front idler wheels, one at each side of the frame.

27. (Currently Amended) A power wheelchair according to claim 26, further comprising a crossbar that extends across the front of the frame, the crossbar being pivotally mounted to the frame about a central fore-and-aft axis, the crossbar carrying ~~the-a~~ front idler wheels wheel at each end.

28 - 30. (Cancelled)